To: CN=Heather Dean/OU=R10/O=USEPA/C=US@EPA[]
Cc: CN=Richard Parkin/OU=R10/O=USEPA/C=US@EPA[]

Bcc: []

From: CN=Phil North/OU=R10/O=USEPA/C=US

Sent: Sat 4/14/2012 12:03:09 AM

Subject: BLM 1971 recognition of the risk of cumulative effects

parker history kvichak nushagak.pdf

From page 233 of the Parker paper.

"A seemingly minor but potentially major problem should be mentioned. The Kvichak salmon run is the product of thousands of small spawning areas. Loss of any one of these small areas will not seriously affect the total run, so the separate areas are not looked upon as being individually important. The loss of many of these areas all at once could have a noticeable effect and would probably be strongly opposed by the fishing industry. But loss of a few areas at a time extended over many years would have the same effect. Yet because the resultant decline in productivity would be prolonged there would be no great public outcry over the loss in spawning area. The fishing industry would more probably blame the lowered productivity on Fish and Game Department management policies."

Phillip North
Environmental Protection Agency
Kenai River Center
514 Funny River Road
Soldotna, Alaska 99669
(907) 714-2483
fax 260-5992
north.phil@epa.gov

[&]quot;To protect your rivers, protect your mountains."